

ICE YACHTING IS WILDEST, SPEEDIEST WINTER SPORT

Ideal Conditions Rare, but Enthusiasts Along the Shrewsbury and Hudson Rivers and in Certain Inland Lakes Yearly Get Thrills With Frail Craft That Outrun the Very Gale That Drives Them—Rudderless Scooters on Long Island Bays Another Type of Fast Sailing Craft, Amphibious as Well

A variant of ice yachting, skate sailing, is shown at the right. Below is an ice yacht regatta scene and striking pictures showing phases of the thrilling pastime.



By TORREY FORD.

ALTHOUGH iceboating is one of the oldest sports on the winter program it is still considered a novelty in the average community. Nine persons out of ten who wouldn't lift an eye to the heavens at the whirr of a passing airplane would walk a mile to see an iceboat in action. And yet the records clearly show that the iceboat was doing 100 miles an hour half a century before the first plane was brought out on the field for the first timid test.

There probably never has been any official census taken on the subject; but if there were the figures wouldn't show much above one iceboat to every 100,000 population. While Red Bank, N. J., and Patchogue, L. I., might come in strong with an iceboat to every three families, this tally would be offset by the total lack of registration of any craft from Louisville, Ky., or Houston, Tex.

Iceboating on the Gulf of Mexico has always been notoriously poor. Nor has it ever become much of a rage among the regulars at Palm Beach. Jump half a continent and you find the same neutral attitude still prevailing. You might scour the Province of Quebec and gather only a handful of enthusiasts. You might page the entire Puget Sound without locating a single iceboat skipper.

True Iceboating Is Like

Riding on a Razor Blade

The explanation is comparatively simple. Iceboating is a fussy sport, especially about climate. It demands severe cold weather without snow, long stretches of ice without flaws and traffic regulations that have eliminated all mention of a speed limit. It is only an occasional spot on the map that can step up and meet these rigid qualifications.

And when the ideal iceboating territory is found there is still the difficulty of selecting sportsmen who are willing to swap a few thrills for the privilege of being yanked over the ice at a breakneck speed on a conveyance that has little more stability than the average safety razor blade.

Our own knowledge of the sport is entirely from hearsay. The only thrills we have ever had from boating on the ice are second hand thrills. We have seen them come swooping down seventy-five or eighty miles an hour, skid ninety feet taking a corner and sheer off on another tack. We have seen a boat tear off ahead of the wind, fall into a pinwheel and shoot back to meet the breeze again.

Barring pneumatic tubes, the iceboat is probably the only air propelled contrivance known to man that can travel faster than the wind. Yet the iceboat fan will tell you that it is not a dangerous sport. A few legs get broken and a collarbone here and there, but, generally speaking, it's a pretty safe pastime. Oh my, yes! He insists upon it.

If a participant sticks to his ship and avoids any serious collisions he may check in at the yacht club at night; but if he loses his hold on a turn or gets dizzy with the speed and parts company with the main sheet he may ride a mile on the ice with nothing but centrifugal force as motive power and nothing to sit on but the original pattern as designed in the Garden of Eden. Any breaks in the ice or shore lines encountered during this record slide are treated as legitimate hazards of the course.

But for all the broken bones and impromptu duckings in ice water, the regular sailors of the iceboat fleet admit that the thrills make up for everything. They like that carefree feeling of ripping off a mile in nothing flat. It's exhilarating and a great tonic for depressed spirits.

Iceboat Territory

In Vicinity of New York

The favorable part of the sport from a metropolitan point of view is the accessibility of the iceboating centers. Three of the best known centers in the country are within easy commuting reach of a New York office. These are the Shrewsbury River in New Jersey, the Hudson River and Manhasset Bay. Other iceboating centers dotted about the country include Orange Lake and Lake Chautauque in New York, Lake Champlain, Gull Lake at Kalamazoo, Michigan; the Wisconsin and Minnesota lakes and along the southern shores of the Great Lakes.

There is considerable discussion as to who did the first iceboating in America. The Hudson claims the first ice yacht club, the Poughkeepsie Ice Yacht Club, with a charter dating back to 1861. Still, it was more than ten years ago that the Shrewsbury River yachtsmen held a carnival to cele-



W. Butler Duncan, famous yachtsman, on his scooter in Manhasset Bay. Above is shown crew righting the yacht after a spill.

brate the seventy-fifth anniversary of iceboating in New Jersey. But this early navigating of the Jersey ice bore about as much resemblance to modern iceboating, according to the Hudson veterans, as a soap box on wheels does to a 1921 automobile.

Whatever the facts really are, the Shrewsbury has gone far ahead in popularity in recent years while the Hudson has fallen off. Keeping the Hudson open for steamer navigation and cutting ice for commercial purposes has played its part in discouraging the activities of the original Poughkeepsie Ice Yacht Club.

Iceboat Jack Frost

Still Holds the Record

In the history of iceboat racing during the last thirty-five years the name of one boat stands out boldly. The Jack Frost began her racing career in 1883 by capturing the challenge pennant in a race between Poughkeepsie and North Shrewsbury. To-day she still holds the lead and stands by a record made February 9, 1893.

The time record was established by the Jack Frost sailing over a twenty-mile course in 49 minutes 30 seconds, or at the rate of a mile in 2 minutes and 28 seconds. The calculated distance that the yacht sailed in covering the course was 31.38 miles, making an average of a mile in 1 minute and 24 seconds.

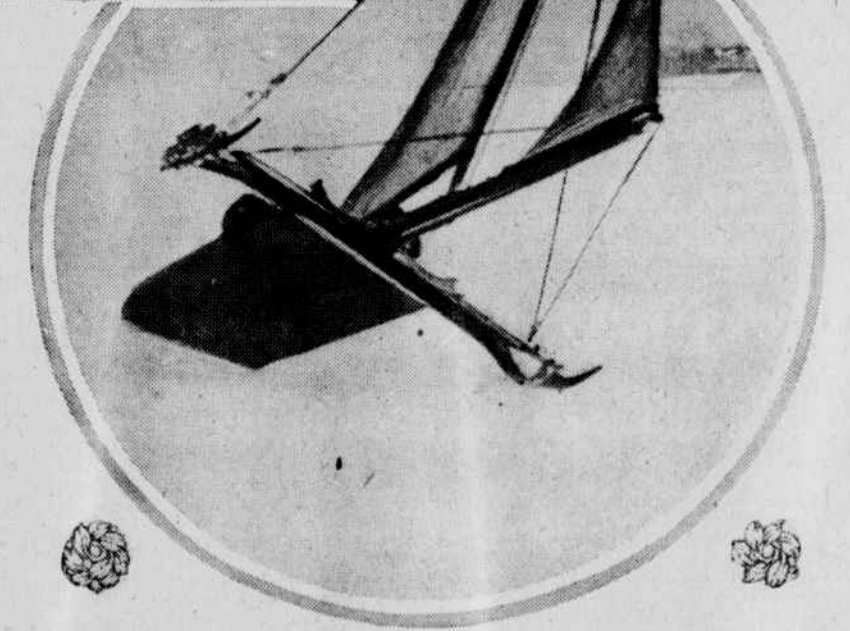
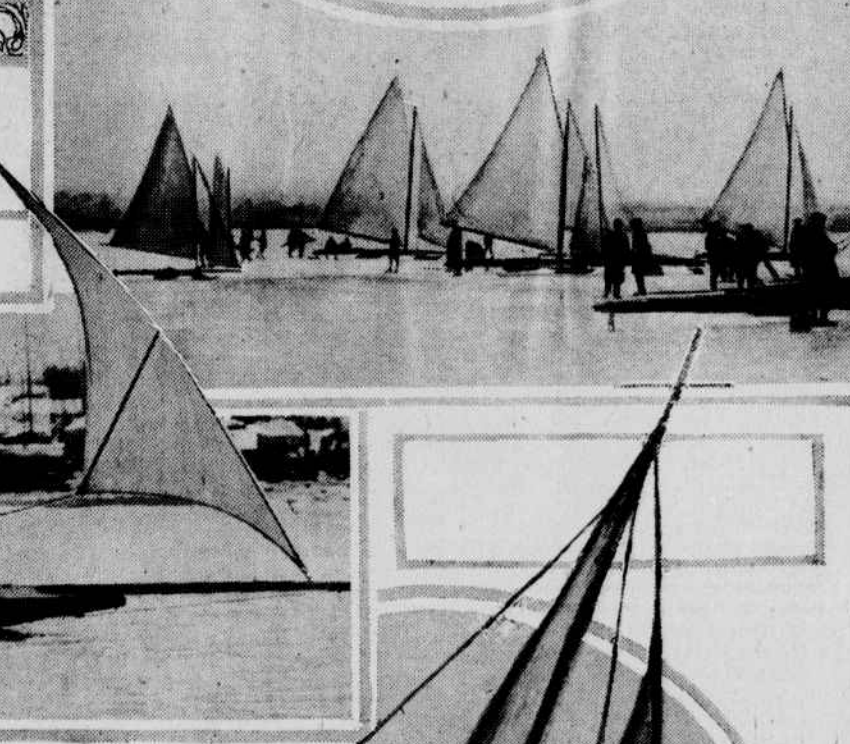
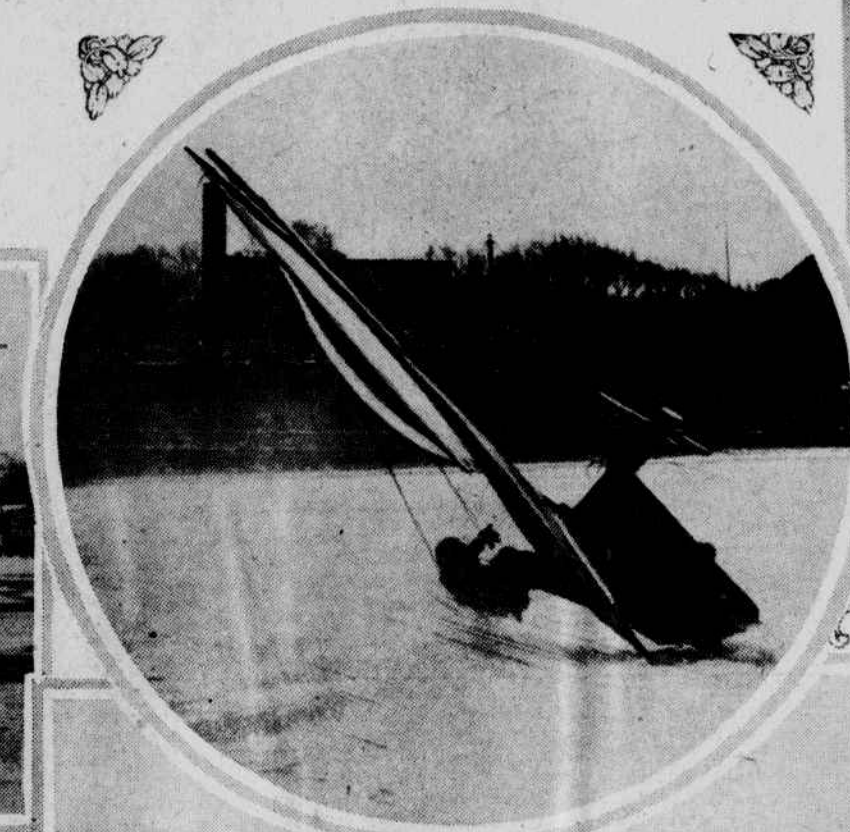
Why this record should stand over so long a period of years when iceboats are supposed to make much greater speed is not easily understood by a person unacquainted with the details of racing. The chief excuse offered by the ice skippers themselves is that the average course over which a race is held is so narrow that a yacht is not able to hold a course for more than a few minutes. Hardly does it get under way before the opposite shore is reached and it has to sheer off on another tack.

Another factor that holds up the speed of the race is slowing down to round the leeward buoys. Where this has to be done several times during the race it lengthens the course and increases the elapsed time.

The Wolverine, of the Kalamazoo Ice Yacht Club, has to her credit a record in a race to windward and return of twenty miles in forty minutes flat, or at the rate of a mile in two minutes; but in this race the actual distance sailed was not known.

The slowest time ever recorded for a victor in a race was when the Icicle won the Hudson River vs. Carthage race in 1899 in the elapsed time for the twenty mile course of 1 hour 9 minutes and 37 seconds. As the Icicle actually sailed 31.38 miles, this was at the rate of a mile in two minutes and thirteen seconds. The Icicle held the challenge pennant from 1888 to 1892 and won it again in 1899.

The average speed made over the Hudson River course in all these races figures out to about one mile in one minute and fifty-five seconds. In spite of this, various skippers have reported speeds made over a measured distance up to 100 miles an hour. Archibald Rogers, a veteran ice yachtsman,



This snapshot shows an ice yacht careening along at better than sixty miles an hour.

Photos by Edwin Lovick.

is credited with doing eighty-four miles an hour in Jack Frost for six miles in a race with Haze.

Practically all iceboats are built with a converted sloop rig, jib and mainsail. There are three main parts in the construction: the hull or backbone, commonly called the center-timber, the runner plank on which the hull rests and two runners attached to each end of the runner plank, and the rudder. The rudder is the only movable part of the boat, with a horizontal and vertical movement.

The sails of an ice yacht and those of a sailing craft are essentially the same except in the cut and the weight of the canvas. The ice sails are made of a lighter canvas and they are cut as flat as possible. No draft is given either to the jib or mainsail.

Various other rigs have been tried without any great success. The lateen rig is used almost exclusively out West and modifications of the lateen have been used in Eastern centers. On smaller boats where the sail area does not exceed 250 square feet, the cat rig has given fair success. The mast has to be stepped so far forward in the cat rig to preserve the proper balance that it has not been generally adopted. But the sloop rig has been undergoing a gradual change, with the mainsail getting larger and the jib being made smaller. At present, the jib on the iceboat is so small that it is used primarily for balance and only incidentally for driving power.

The limit of size was reached in the building of the Icicle and the Jack Frost. The Icicle measured 68 feet 11 inches over all and had a sail area of 1,070 square feet. Although she was one of the fastest boats on the ice for a time, ultimately she was beaten by a boat that carried less than half the same sail area.

Since that time the trend has been toward smaller boats, both for racing and for pleasure boats. Different parts of the country have gone in for special classes. At Kalamazoo, the 450 square foot class has had a considerable vogue, while at Orange Lake the majority sail in the 250 square foot class.

There is a distinctive type of iceboat called the Madison type, which was conceived on the lakes around Madison, Wis., and another type that was developed in northern Michigan. The Hudson River type is generally used around New York.

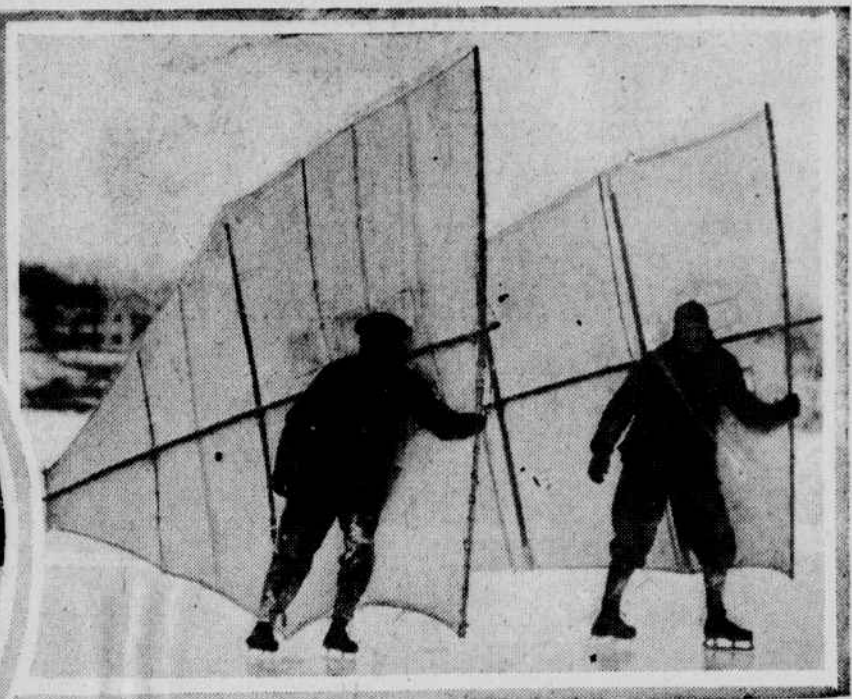
It Is Not an Easy Thing

To Sail This Queer Craft

One cannot learn to sail an iceboat by dropping out some fair afternoon and taking a few tricks at the tiller. Even an experienced water sailor has got to begin all over again and be brought up gradually to the point where he can be trusted to take an iceboat out from its moorings with some prospect of bringing himself and the boat safely back to port.

Sailing her to windward is easy enough, according to experts. Any one who can distinguish between port and starboard and knows a flaw when he sees one can sail an iceboat off to windward without much difficulty. The tricky part comes in sailing to leeward, starting, stopping, jumping cracks, maneuvering narrow passages and threading the traffic of other iceboats, skaters and on-lookers.

The secret of sailing to leeward, once gained, makes it not such a complicated art. Instead of paying off the sheet and letting her run before the wind as in water sailing, the helmsman must trim his sails close, "flat aboard" as the expression goes. If the



climatic conditions make ice strong enough to hold a boat a doubtful quantity. A small sized scooter can carry a load of four to five passengers, though where there is much open water the safer system is to restrict the attendance to the captain and a mate.

The typical scooter is about fifteen feet long, with a wide beam. It has an open cockpit about five feet long, the rest of the surface decked over, with a heavy combing built to take hard knocks. It has a jib-mainsail rig, with a sail area from 75 to 125 square feet. The racing scooters have two jibs and a double set of bowsprits, to use according to the weather.

The amazing feature of this curious craft is the total lack of any steering apparatus. A novice might hunt in vain for a tiller and finally decide that the boat had left the shop minus a few of the essentials. The skipper of a scooter has to rely on his sails and ballast, a delicate matter of balance, for all of his steering. Yet most of those who have sailed a scooter insist that once you have done away with a tiller, you never want to use one again.

No Tiller on Scooter.

The Jib Does the Work

The jib does most of the steering. Hold fast to the mainsail and let go the jib, and the scooter comes around as if she were on a turntable. To come up in the wind, the helmsman merely has to step lightly toward the bow and the lightened stern will swerve around. By an adjustment of weight and a careful handling of the sails a scooter turns in its own length.

But when it comes to sailing before the wind the scooter balks absolutely. As soon as the mainsail blankets the wind from the jib, the steering power of the boat is gone. It is necessary to tack before a wind just as you would tack into it.

The real thrill of scootering comes in taking off from ice into ice water. The scooter is driven straight at the water. Just before reaching the water, the crew stands up to relieve the boat of all dead weight. If she takes it on a slant, there is good chance of a wet spill; but if the man who controls the jib is strictly on the job and she takes it straight she floats off easily without shipping any water.

Heading for solid ice again is more sport. The proper maneuver is to take that head on too, with as much momentum as possible. If the wind is blowing sufficiently, the scooter will mount the ice and be off on her runners without any fuss. In a light breeze, however, it is sometimes necessary to pull the boat up with the pike pole provided for that purpose.

The scooter can make between thirty and forty miles an hour. During the ice season the Knickerbocker and Manhasset Bay Yacht Clubs stage races every Saturday and Sunday. Meanwhile, the Shrewsbury River enthusiasts are maintaining their loyalty to the old fashioned iceboat.

Regatta committees of the various ice yacht clubs have so far failed to announce the exact dates of their big races for this year. In fact, they make a particular point each year of being as indefinite as possible. An ice yacht race is too risky an enterprise to be scheduled many hours ahead of starting time. Even if the committees could forecast correctly a week of ice, a young blizzard might come along any day and bury the course under a foot or so of frozen snow.

An ice yachtsman has to have lots of patience. And then some.

sheet were slacked off the speed of the ice-yacht could not exceed the speed of the wind, which—as iceboating rates it—is hardly moving.

The best point of sailing is about five points from the wind. That is where she sets up on a single blade and flies over the ice. An ice yacht can sail at a moderate speed within 2-3 points of the wind.

There seems to be less chance of capsizing in an iceboat than in a regular sailboat. When the windward runner is far up in the air and to all appearances the boat is about to go over, the end of the main boom is resting securely on the ice and preventing such a casualty. Now and then they do go over until the masthead strikes the ice, but they are easily righted and off on another spurt as though nothing had happened.

The average boat is built to hold a crew of not more than two, though the majority of racing crafts manage to get along just with a skipper. In the matter of weight and balance, the one man crew is far to be preferred; but in the excitement of intricate maneuvers in a stiff breeze, the helmsman can generally find use for an extra pair of hands.

Now Comes the Scooter

To Dispute Supremacy

While the modern iceboat will probably never have any rival on the ice in the matter of speed, the scooter has come in during the last ten years or so and is being used both for pleasure and duty on Great South Bay and Manhasset Bay. The scooter travels over ice or water, snow or any other element that it happens to encounter and gives everybody a good time.

Actually the scooter is little more than a pumpkin shaped, South Bay duck boat sitting on a pair of runners. It was originally used by the baymen and life guards who needed some means of communication between the mainland and the outlying beaches during the winter months when part of the bay was frozen and part open water.

To-day the scooter is used in various parts of the country, especially where the

Odd Facts About New York

THE amount of water used daily by the people of the greater city would make a lake which would be exactly one mile long, half a mile wide and seven feet deep. On other words, it is 740,000,000 gallons.

The number of persons walking up and down Fifth avenue at Forty-second street in the daytime averages about 13,000 to the hour. The official figures are, 129,330 for the ten hours between 3:30 A. M. and 3:30 P. M. The vehicles passing at the same time number 14,182. The pedestrians passing up and down Broadway at Forty-second street during the same ten hours average 111,306, and the vehicles number 16,230. On Fifth avenue, at Thirty-fourth street, the pedestrians number 71,590 and the vehicles 16,930.

The total length of Manhattan Bridge is two miles less 1,230 feet. Williamsburg Bridge is 7,200 feet and the old Brooklyn Bridge is 6,537 feet.

The wharves and docks of New York, not including those on the New Jersey side, number 713.

Place all the streets of the greater city end to end and it is safe to say you would have a street that would reach across the continent. The streets of Manhattan, a borough which is more "confined" than some of the others, have an aggregate length of 185.5 miles.

The number of dead bodies found in the city in 1920 was 554, of which 470 were males. All of these were unknown when

found, but nearly all were later identified. The persons reported missing in the same year were 6,670, nearly all of whom were traced by the police. Inquiries for many others were made, but the number stated are regarded as the actual missing.

The diamonds and pearls entering this port annually would be worth literally about thirty cents to every person in the United States. The value of the cut and uncut gems entering last October was \$3,440,710. In addition to the real thing imitation gems to the value of \$42,723 entered during the same month.

The deepest part of New York Bay is at the southern end of the Narrows. The depth there is 109 feet. In some places out some distance from shore it becomes as shallow as fifteen feet. The greatest depth of the Hudson opposite the Battery is fifty-two feet. It is from fifty-two to fifty-seven feet deep opposite Central Park. Opposite Fifty-ninth street in the river the depth to bedrock is 125 feet, but about seventy-five feet of mud and silt lie on this bedrock under the water.

In round figures and allowing for the changes wrought by tides the width of the Hudson opposite the Battery is 1,500 yards; at Fifty-ninth street it is 1,200 yards, and at Fortieth street 1,400 yards.

The city government owns or leases 2,900 buildings, whose annual lighting bill amounts to \$918,916. The electric bulbs for these buildings alone cost about \$100,000 annually, according to the officials of the Lighting Department.